

Cumberland County Council.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

F. H. MORISON, M.D., D.P.H.,

FOR THE YEAR 1918.

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Cumberland County Council.

TO THE CHAIRMAN AND MEMBERS OF THE
HEALTH COMMITTEE.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

In presenting to you this, my Eleventh Annual Report, namely, that for the year 1918, I feel that a Report issued some eight or nine months after it is due loses practically all the interest it might otherwise have, as well as a large part of its utility.

When, however, you reflect on all the difficulties inevitable after the period of stress through which we have just passed, and also on the greatly increased amount of work your Health Department has had to cope with, I am sure I will not appeal for your indulgence in vain.

Moreover, my difficulties have been increased in not having even yet received all the reports from the Medical Officers of Health of the districts.

Taking everything into consideration, I think we cannot consider the Vital Statistics for the year but as satisfactory.

The Birth-rate, which in 1917 fell to 20.8, was in 1918 21.5, a rise of only 0.7, and when we consider that the Birth-rate of England and Wales was only 17.7, it is a matter for congratulation that the rate in this County has kept up so well as it has done.

The Death-rate, it is true, is 2.6 per 1,000 higher than in 1917, but this is more than accounted for by the large number of deaths during the epidemics of Influenza.

The Infant Mortality rate is 17 per 1,000 lower than in the previous year, and is 4 per 1,000 lower than for the whole of England and Wales.

I have the honour to be,

Your obedient Servant,

F. H. MORISON.

December, 1918.

Population.

The information given in this Report is based on figures given to the Health Department by the Registrar-General.

The estimated population given by the Registrar-General in some cases differs from that adopted by the Medical Officer of Health, and, therefore, there may be some discrepancies between the figures in this Report and those of the Medical Officers of Health of the districts.

In considering the figures given in this Report, I would direct attention to the remarks of the Registrar-General:—

The “ death-rate population ” excludes all non-civilian males, whether serving at home or abroad. This is necessary for the purposes of local death-rates, because it has proved impossible to transfer the deaths of non-civilians to their area of residence, or to deal in any other satisfactory manner with the local mortality of this element in the population. These estimates are based mainly from the rationing returns placed at the Registrar-General’s disposal by the Ministry of Food.

The “ birth-rate population ” on the other hand is intended to include all the elements of the population contributing to the birth and marriage rates. It consists, therefore, of the death-rate of civilian population plus all non-civilians enlisted from this country, whether serving at home or abroad. This non-civilian element has been distributed over all the districts in the country in proportion to their estimated civilian population.

The estimated population of the Administrative County is as under:—

For Birth-rate	..	..	..	..221,778
For Death-rate	..	..	..	..197,934

In Urban districts the figures are respectively 124,569 and 111,176, and in Rural districts 97,209 and 86,758.

Births.

The Births registered in the County during 1918 numbered 4,769, 2,486 males and 2,283 females, giving a Birth-rate of 21.5 per 1,000 of population, compared with 4,671, and a rate of 20.8 the previous year.

In the Urban districts there were 2,858 births, 1,469 males and 1,389 females, giving a birth-rate of 22.9, and in Rural districts 1,911, 1,017 males and 894 females, giving a birth-rate of 19.6 per 1,000 of population.

The corresponding figures for the previous year were :—

Urban districts, 2,779 and a rate of 22.2.

Rural districts, 1,892 and a rate of 19.1.

The Birth-rate for England and Wales was 17.7.

Arranged in the order of their birth-rates, the Urban districts stand thus :—

Egremont ..	30.1 (21.9)	Maryport ..	20.5 (23.2)
Harrington ..	28.1 (25.2)	Aspatria ..	19.7 (18.2)
Cleator Moor ..	27.7 (24.1)	Wigton ..	18.8 (12.5)
Arlecdon and Frizington ..	27.5 (27.5)	Holme Cultram	17.0 (18.9)
Workington ..	25.5 (24.0)	Penrith ..	15.6 (15.2)
Whitehaven ..	24.4 (24.0)	Cockermouth	15.0 (19.8)
Millom ..	20.9 (23.2)	Keswick ..	10.9 (13.2)

NOTE.—The figures in brackets in all the tables are the rates for 1917.

And the Rural districts thus :—

Whitehaven ..	24.4 (22.5)	Bootle ..	16.7 (16.8)
Cockermouth ..	23.3 (22.4)	Carlisle ..	16.0 (17.4)
Wigton ..	20.1 (20.0)	Penrith ..	14.6 (15.0)
Longtown ..	18.5 (17.8)	Alston ..	14.3 (15.3)
Brampton ..	17.5 (15.8)		

Illegitimate Births.

The number of illegitimate births was 309, so that 64 per 1,000 of the total births were illegitimate.

The ratio of illegitimate births per 1,000 of total births in the various sanitary districts is as under :—

URBAN DISTRICTS.		RURAL DISTRICTS.	
Arlecdon & Frizington	54	Alston	71
Aspatria	27	Bootle	59
Cleator Moor	56	Brampton	127
Cockermouth	111	Carlisle	64
Egremont	32	Cockermouth ..	63
Harrington	47	Longtown	171
Holme Cultram ..	62	Penrith	65
Keswick	139	Whitehaven	70
Maryport	82	Wigton	74
Millom	27		
Penrith	112		
Whitehaven	49		
Wigton	119		
Workington	49		

In Urban districts 56 per 1,000 births were illegitimate.
In Rural districts 77 per 1,000 births were illegitimate.

Deaths.

The number of Deaths of persons belonging to the County was 3,490, 1,752 males and 1,738 females. This gives a rate of 17.6 per 1,000 of population.

In the Urban districts there were 2,059 deaths, 1,019 males and 1,040 females, giving a death-rate of 18.5, and in the Rural districts, 1,431 deaths, 733 males and 698 females, giving a rate of 16.7.

The death-rate for England and Wales was 17.6.

Arranged in the order of their death-rates, the Urban districts stand thus :—

Cockermouth ..	23.1 (13.0)	Workington ..	17.1 (15.2)
Egremont ..	22.8 (13.8)	Cleator Moor ..	16.5 (16.6)
Whitehaven ..	22.4 (18.0)	Millom ..	16.4 (13.5)
Wigton ..	20.5 (13.6)	Holme Cultram	16.2 (14.2)
Keswick ..	19.7 (18.3)	Harrington ..	16.1 (14.0)
Maryport ..	19.0 (17.7)	Arlecdon and ..	15.1 (19.5)
Penrith ..	17.1 (14.7)	Frizington	
		Aspatria ..	12.8 (10.7)

And the Rural districts thus :—

Alston ..	19.5 (17.4)	Longtown ..	15.6 (15.2)
Brampton ..	19.2 (13.5)	Whitehaven ..	15.6 (14.4)
Wigton ..	18.2 (13.5)	Carlisle ..	15.5 (14.1)
Cockermouth ..	16.7 (13.3)	Penrith ..	14.4 (14.4)
Bootle ..	15.8 (11.0)		

Infant Mortality.

4,769 births were registered during the year, 447 infants died before reaching the age of one year, so that the infant mortality is at the rate of 93 per 1,000 births.

In the Urban districts there were 2,858 births and 287 deaths of infants. The infant mortality rate was, therefore, 100 per 1,000 births, 20 per 1,000 lower than in the previous year; and in Rural districts 1,892 births, 160 deaths of infants, giving an infant mortality rate in Rural districts of 83 per 1,000 births, 12 per 1,000 lower than in the previous year.

The infant mortality for England and Wales was 97.

Arranged in the order of their infant mortality, the Urban districts stand thus :—

Cockermouth ..	166 (105)	Workington ..	103 (113)
Keswick ..	163 (75)	Egremont ..	88 (121)
Aspatria ..	121 (85)	Holme Cultram	87 (104)
Harrington ..	118 (129)	Millom	81 (98)
Cleator Moor ..	116 (155)	Arlecdon and ..	61 (112)
Whitehaven ..	113 (142)	Frizington	
Maryport ..	104 (146)	Wigton	60 (139)
		Penrith ..	37 (70)

And the Rural districts thus :—

Longtown ..	156 (103)	Penrith ..	60 (93)
Cockermouth ..	105 (114)	Carlisle	59 (118)
Brampton ..	104 (56)	Bootle	29 (39)
Whitehaven ..	75 (118)	Alston	Nil. (44)
Wigton	70 (60)		

The main causes of infant deaths during the year were :—Measles (14), Whooping Cough (18), Influenza (23), Tuberculosis (all forms) (10), Bronchitis (44), Pneumonia (47), other Respiratory Diseases (7), Diarrhœa (32), and Congenital Debility (157).

Cancer.

The following table gives in order the death-rates from Cancer in the Urban districts :—

Keswick ..	2.5 (1.9)	Whitehaven ..	1.1 (1.5)
Cockermouth ..	2.3 (1.1)	Maryport ..	1.0 (1.0)
Holme Cultram	1.9 (0.7)	Workington ..	1.0 (1.0)
Penrith	1.7 (1.4)	Cleator Moor ..	0.8 (1.5)
Egremont ..	1.2 (1.0)	Arlecdon and ..	0.6 (0.2)
Millom	1.2 (1.6)	Frizington	
Wigton	1.2 (1.6)	Aspatria ..	Nil. (1.7)
		Harrington ..	Nil. (0.2)

And in the Rural districts :—

Brampton ..	2.2 (1.1)	Penrith ..	1.0 (1.0)
Bootle ..	2.0 (1.4)	Cockermouth ..	0.9 (0.7)
Carlisle ..	2.0 (0.9)	Whitehaven ..	0.9 (1.1)
Alston ..	1.9 (1.1)	Longtown ..	0.6 (1.0)
Wigton ..	1.5 (1.8)		

Zymotic Diseases.

The diseases usually included under this heading are :— Smallpox, Scarlet Fever, Diphtheria (including Membraneous Croup), Fevers (Enteric, continued, etc.), Measles, Whooping Cough and Diarrhoea.

They were responsible for 179 deaths, equal to a death-rate of 0.9 per 1,000 of population, compared with 199, and a rate of 0.9 in 1917.

In Urban districts the rate was 1.0, and in Rural districts 0.6, compared with 1.3 and 9.5 in the previous year.

Arranged in the order of their Zymotic death-rate, the Urban districts stand thus :—

Whitehaven ..	2.2 (1.0)	Cleator Moor ..	0.8 (0.2)
Arlecdon and ..	1.4 (0.2)	Egremont ..	0.6 (0.4)
Frizington		Millom	0.6 (0.4)
Workington ..	1.4 (2.4)	Holme Cultram	0.4 (nil.)
Cockermouth ..	1.1 (0.2)	Maryport ..	0.3 (4.5)
Aspatria ..	0.9 (0.8)	Penrith ..	0.1 (0.1)
Harrington ..	0.9 (0.9)	Keswick ..	Nil. (0.2)
Wigton	0.9 (0.9)		

And the Rural districts thus :—

Cockermouth ..	1.1 (0.9)	Alston	0.3 (1.5)
Brampton ..	1.0 (0.1)	Longtown ..	0.3 (0.4)
Whitehaven ..	0.8 (0.7)	Penrith ..	0.3 (0.09)
Wigton	0.5 (0.5)	Bootle	Nil. (0.2)
Carlisle	0.4 (0.4)		

Infectious Diseases (Notification) Acts.

There were during 1918, 3,519 cases of infectious disease notified, 210 of these being of Pulmonary Tuberculosis, and 38 cases of Tuberculosis other than Pulmonary, compared with 3,414 cases notified in 1917, an increase of 105 cases notified during the year.

Smallpox.

No case of Smallpox has occurred during the year.

Scarlet Fever.

164 cases were notified, compared with 272 the previous year. The only districts in which it was at all prevalent being the Urban districts of Egremont and Wigton, and the Rural districts of Penrith and Whitehaven.

There were no deaths registered in Urban, but three in Rural districts.

Diphtheria and Membraneous Croup.

254 cases were notified. This gives a rate of 1.28 per 1,000 of population. The rate for the aggregate of Administrative Counties of England was 1.16.

The districts in which it was most prevalent were:—*Urban*—Arlecdon and Frizington, 14 cases, rate 2.94; Egremont 12 cases, rate 1.89; Wigton, 4 cases, rate 1.26; and Workington, 95 cases, rate 3.83. *Rural*—Bootle, 7 cases, rate 1.29; Cockermouth, 32 cases, rate 1.55; and Whitehaven, 19 cases, rate 1.45.

Typhus Fever.

No case was notified.

Enteric Fever.

23 cases were notified, 6 in Urban and 17 in Rural districts.

Two in the Borough of Whitehaven, and one each in the Borough of Workington, the Urban districts of Arlecdon and Frizington, Aspatria and Maryport 14 in the Rural district of Cockermouth, and one each in the Rural districts of Alston, Penrith and Whitehaven.

Puerperal Fever.

Two cases were notified, one in the Urban district of Maryport, and one in the Rural district of Longtown.

There were, however, four deaths registered as due to Puerperal Fever, one in Maryport, one in Longtown, and one each in the Rural districts of Cockermouth and Wigton; the two latter were never notified.

Measles.

2,701 cases of Measles, and 15 cases of German Measles were notified during the year.

In 1917, 2,255 cases of Measles were notified, with 60 deaths; during 1918 there were 52 deaths.

The following table shows the number of cases notified in each sanitary district of the County, with the rate per 1,000 of population, as well as the number of deaths in each district—

<i>Sanitary Dislrctcl.</i>	<i>Cases.</i>	<i>Rate.</i>	<i>Deaths.</i>
URBAN.			
Borough of Workington	129	5.2	6
„ Whitehaven	455	25.7	21
Arlecdon & Frizington	167	35.0	1
Aspatria	5	1.4	0
Cleator Moor	143	17.9	5
Cockermouth	2	0.4	0
Egremont	179	28.1	0
Harrington	170	42.2	1
Holme Cultram	68	16.2	1
Keswick	0	0	0
Maryport	16	1.5	1
Millom	11	1.1	0
Penrith	255	33.3	0
Wigton	119	37.5	0
RURAL.			
Alston	29	11.1	0
Bootle	24	4.3	0
Brampton	34	5.0	0
Carlisle	85	8.2	1
Cockermouth	423	20.4	11
Longtown	25	3.8	1
Penrith	66	5.9	0
Whitehaven	128	9.7	2
Wigton	183	18.0	1

Whooping Cough.

34 deaths were registered as due to Whooping Cough, compared with 51 the previous year.

Diarrhoea.

was responsible for 68 deaths, 53 of which were children under two years of age.

Erysipelas.

64 cases were notified, compared with 79 in 1917.

Tuberculosis.

During the year 196 cases of Pulmonary Tuberculosis (Consumption) were notified, and 39 of other forms of Tuberculosis.

177 deaths were registered as due to Pulmonary Tuberculosis, 112 in Urban and 65 in Rural districts, compared with 177 deaths, 108 in Urban and 69 in Rural districts in 1917.

This gives a death-rate for the Administrative County of 0.9 per 1,000 of population. For the Urban districts 1.0, and for the Rural districts 0.7, practically the same as in the previous year.

In addition to these 177 deaths, there were 71 registered as due to other forms of Tuberculosis, 43 in Urban and 28 in Rural districts. Compared with the previous year, the figures for which were in the County 77, Urban districts 59, Rural districts 28. The death-rates from all forms of Tuberculosis are, for the County 1.2, Urban districts 1.3, and Rural districts 1.0 per 1,000 of population.

Arranged in the order of their mortality from Pulmonary Tuberculosis, the Urban districts stand thus :—

Keswick	..	2.2 (0.8)	Holme Cultram	0.9 (0.9)
Wigton	..	1.8 (1.3)	Arlecdon and ..	0.8 (2.4)
Penrith ..	..	1.7 (1.3)	Frizington	
Whitehaven	..	1.4 (1.6)	Workington	.. 0.8 (0.8)
Cleator Moor	..	1.0 (1.1)	Maryport	.. 0.6 (0.2)
Aspatria	..	0.9 (0.5)	Millom..	.. 0.6 (0.7)
Harrington	..	0.9 (0.4)	Cockermouth	.. 0.4 (0.4)
			Egremont	.. 0.4 (0.1)

And the Rural districts thus :—

Alston	..	1.1 (2.6)	Whitehaven	..	0.6 (0.5)
Carlisle	..	1.0 (1.1)	Bootle ..	..	0.5 (0.9)
Longtown	..	1.0 (1.1)	Brampton	..	0.4 (0.5)
Penrith ..	..	0.8 (0.6)	Wigton ..	..	0.4 (0.8)
Cockermouth	..	0.7 (0.5)			

Arranged in the order of their death-rates from all forms of Tuberculosis (including Pulmonary) the Urban districts stand thus :—

Wigton	..	2.5 (1.6)	Harrington	..	1.2 (0.7)
Keswick	..	2.2 (1.3)	Holme Cultram		1.1 (1.2)
Penrith ..	..	1.9 (1.5)	Aspatria	..	0.9 (1.1)
Whitehaven	..	1.8 (2.5)	Egremont	..	0.9 (0.4)
Workington	..	1.4 (1.5)	Maryport	..	0.9 (0.4)
Cleator Moor	..	1.3 (1.6)	Cockermouth	..	0.7 (0.9)
Arledon and Frizington	..	1.2 (3.0)	Millom ..	..	0.6 (1.0)

And the Rural districts thus :—

Longtown	..	2.3 (1.9)	Whitehaven	..	0.9 (0.5)
Alston ..	..	1.5 (3.0)	Cockermouth	..	0.8 (0.5)
Carlisle	..	1.2 (1.1)	Bootle ..	..	0.7 (1.0)
Penrith ..	..	1.2 (0.8)	Brampton	..	0.4 (0.8)
Wigton ..	..	1.0 (1.2)			

During the year 152 applications for Sanatorium Benefit have been received (25 of these were from ex-service men), 102 from insured persons, 81 male and 21 female, 17 from dependants of insured persons over 16 years of age, 2 males and 15 females, and 33 from dependants under 16 years of age, 15 males and 18 females.

Thirty cases were still in receipt of treatment at the end of the year.

Of the applications for Sanatorium Benefit, 13 were not suitable cases for treatment, 14 persons withdrew their applications for benefit, and 4 died before examination by the Tuberculosis Officer.

Of the cases treated, 103 were sent to the Sanatorium, 9 were treated at home, *i.e.*, received Domiciliary Treatment, and the remainder were referred to the Dispensaries. One was recommended for hospital treatment.

One died before the commencement of treatment, and two left the district before examination.

Ten Open-air Shelters were in use during the year.

The following table shows the cases treated during the year, and the result (up to the end of the year) of that treatment :—

TABLE SHOWING CASES TREATED DURING 1918.

CLASS OF APPLICANT	Sex	No. of Applicants	No. Treatment offered	Withdrawn or refused treatment.	Died before examination	Died before completion of treatment	Hospital.	Left district before exam	Domiciliary	Sanatorium Treatment.					
										No.	Im-provd	In statu quo.	Worse	Dead.	Still in San
Insured Persons	M	81	3	9	3	1	1	1	8	55	35	4	1	1	14
	F	21	2	2	—	—	—	—	1	14	11	—	1	—	2
Depend-ants over 16	M	2	1	—	—	—	—	—	—	—	—	—	—	—	—
	F	15	3	1	1	—	—	—	—	9	6	—	2	—	1
Depend-ants under 16	M	15	2	—	—	—	—	1	—	12	7	1	—	—	4
	F	18	2	2	—	—	—	—	—	13	5	1	—	1	6

Again only four Dispensaries were open during the year, one only for four months, and another for seven months.

At the beginning of the year there were 285 names on the registers of the Dispensaries, and 64 new names were entered on the registers during the year.

There were 791 attendances at the Dispensaries, and 715 examinations were made.

The number of casual consultations (excluding contacts) was 68.

Six patients ceased to attend from one cause or another, and 455 visits were paid to patients' homes by the Tuberculosis Officer and the Nurses.

Twenty-four contacts were examined.

There were four deaths of Dispensary patients.

With the exception that ex-service men have preferential treatment in the way of sanatorium beds, there is no difference between their treatment and that of civilians, except that when your Tuberculosis Officer thinks it is necessary and advises the War Pensions Committee to that effect, ex-service men can get a grant of 10s. per week for extra nourishment when in receipt of treatment outside an institution.

The following is a short summary of the procedure adopted for looking after cases of tuberculosis.

On a case being brought to my notice, either by notification or any other means, a form of application for sanatorium benefit is sent. On this form is a certificate to be signed by the medical attendant, specifying what form of tuberculosis he or she is suffering from.

On receipt of this application, the patient is seen by the Tuberculosis Officer or one of his Assistants, who determines what form the sanatorium benefit shall take.

If residential treatment is recommended, he is sent to Blencathra if an adult, but if a child below 14 years of age to Stannington, in Northumberland.

Thirty beds are retained in Blencathra, but recently this number has been found inadequate, and four open-air shelters have been sent there for the use of our patients. Your Committee has also empowered me to make use of as many of the private beds in the Sanatorium as may be necessary and available when our own are full.

Should residential treatment not be necessary, either because the home surroundings are satisfactory, and the patient is likely to do well there, or the case is too advanced for residence in a Sanatorium, either Dispensary or Domiciliary treatment is offered.

At the time of writing this Report, Dispensaries are actively at work in Penrith, Millom, Whitehaven, Workington and Maryport, and within a very short time we hope to have others in Wigton, Aspatria, Cockermouth, Keswick, Cleator Moor and Egremont.

When Dispensary treatment is granted, the patient is advised to report at stated intervals for medical examination. If he fails to come at his stated time, a nurse pays him a home visit to find the reason.

Domiciliary cases may be either primary or secondary.

The former are mostly those in which the disease is so far advanced as to be unsuitable for residential treatment, or in which the patient cannot attend the Dispensary, either by reason of his condition, or because there is no Dispensary within reasonable distance.

All domiciliary cases are, of course, under the care of their own medical man, but are visited at least once a Quarter by one of the Tuberculosis Officers.

The latter are the cases granted Domiciliary treatment after they leave the Sanatorium, most ex-sanatorium cases are recommended either for Dispensary or Domiciliary treatment.

If there is likely to be any long delay in sending a patient to the Sanatorium, Dispensary treatment is recommended till entrance to the Sanatorium.

With regard to nursing arrangements, as soon as the form of treatment is decided on, the Superintendent of Nurses is informed, and the patient is visited by a Nurse. If the case is to go to a Sanatorium, the Nurse sees that the necessary clothing is provided; in the case of ex-service men by the War Pensions Committee up to the amount (£2) they are empowered to spend, and in the case of civilians by the County Council.

Prior to the Pensions Ministry making a grant for clothing, all that was necessary was supplied by the County Council.

Until the patient's admission to the Sanatorium, he is kept under observation by the Nurse, and is visited as often as may be necessary; the same procedure is adopted after he leaves the Sanatorium.

If a Dispensary or Domiciliary case, he is visited as often as may be necessary by the Nurse, in order to see that instructions as to treatment and mode of life are carried out.

During the year 809 visits have been paid by the Nurses to tuberculous cases :—

By the Health Visitors	..	..	..	..	188
By the District Nurses	..	..	..	..	621
					<hr/>
					809

Respiratory Diseases.

During the year 598 deaths were registered as due to Respiratory diseases, excluding Phthisis (Bronchitis, Pneumonia, and other diseases of the respiratory organs).

Of these 396 occurred in Urban districts, and 202 in Rural districts.

These give respectively rates of 3.5 and 2.3 per 1,000 of population, compared with 3.2 and 2.2 in the previous year.

The rate in the Administrative County is 3.0, compared with 2.8 the previous year.

Arranged in the order of their death-rates from Respiratory diseases, the Urban districts stand thus :—

Whitehaven ..	5.5 (3.6)	Arlecdon and ..	3.1 (5.0)
Egremont ..	4.4 (5.1)	Frizington	
Wigton ..	4.4 (3.2)	Cleator Moor ..	2.8 (4.2)
Cockermouth ..	4.2 (4.0)	Harrington ..	2.4 (2.9)
Workington ..	3.7 (2.5)	Maryport ..	2.4 (2.6)
Millom ..	3.6 (4.0)	Penrith ..	2.2 (1.5)
Keswick ..	3.4 (2.7)	Holme Cultram	1.6 (2.4)
		Aspatria ..	0.9 (0.8)

And the Rural districts thus :—

Brampton ..	3.6 (2.5)	Carlisle ..	1.5 (1.8)
Whitehaven ..	3.0 (2.9)	Penrith ..	1.5 (1.9)
Cockermouth ..	2.9 (2.5)	Alston ..	0.8 (2.2)
Wigton ..	2.4 (1.4)	Longtown ..	0.7 (2.7)
Bootle ..	2.2 (1.8)		

Influenza.

During the year there were two outbreaks, the first commencing in May, and lasting till about the end of July, this, however, was a comparatively mild outbreak, but was responsible for 81 deaths. With the exception of a few sporadic cases from the end of July till early in October, the County was free from Influenza.

Early in October a virulent epidemic started, and early in November the disease was more or less prevalent in every sanitary district in the County.

All the Schools were closed from early in November until the end of the year.

In this outbreak there were 574 deaths, a total of 655, or nearly one-fifth of the total deaths from Influenza alone during the year.

Arranged in the order of their death-rates from Influenza, the Urban districts stand thus :—

Egremont 8.3	Wigton 2.5
Cockermouth 7.4	Workington 2.4
Maryport 5.5	Aspatria 2.3
Harrington 3.2	Cleator Moor 2.3
Whitehaven 3.2	Arelcdon & Frizington 1.8
Keswick 2.5	Penrith 1.7
Millom 2.5	Holme Cultram .. 0.9

And the Rural districts thus :—

Alston 4.6	Penrith 3.0
Wigton 3.8	Longtown 2.9
Cockermouth 3.6	Carlisle 2.8
Bootle 3.4	Brampton 2.6
Whitehaven 3.4	

Deaths from Influenza were registered at all age periods, but the highest mortality was in the age periods 15 to 25, and 25 to 45. In most age periods the deaths of females exceeded that of males.

Table showing the age periods at which deaths from Influenza occurred :—

	At all ages.	Under 1	1—2	2—5	5—15	15—25	25—45	45—65	Over 65
Urban Districts.									
Males ..	160	7	8	17	18	27	53	26	4
Females ..	205	6	12	15	20	40	73	25	14
Rural Districts.									
Males ..	148	5	3	13	15	30	55	18	9
Females ..	142	5	9	8	10	30	55	16	9
Totals for County.									
Males ..	308	12	11	30	33	57	108	44	13
Females ..	347	11	21	23	30	70	128	41	23
	655	23	32	53	63	127	236	85	36

During such epidemics severe strictures are frequently passed on the inefficiency of existing public health measures to prevent or mitigate them.

It is true that little is yet known about the cause of Influenza, and no effective measures have been devised for preventing such outbreaks, yet much can be done to prevent the serious after-effects which in years to come must follow such epidemics, if each individual will remember his or her responsibility to the rest of the community.

When the peculiarities of Influenza are realised, it must be obvious to every thinking person that the prevention of the disease, as well as the prevention of complications, is a matter more for each individual than for the Medical Officer of Health.

The chief peculiarities of the disease are :—

- (1) That the incubative period is very short.
- (2) That it is exceedingly infectious, more especially in its early stages.
- (3) That its onset is very sudden, and the early symptoms may be mistaken for a common cold.
- (4) That neglect to take proper care in the early stages may, and frequently does, lead to an exceedingly fatal form of pneumonia, and
- (5) That an infected person may, by coughing and sneezing, infect all persons in his immediate vicinity, *e.g.*, in a room, train or tram-car.

Many Sanitary Authorities in the County issued notices warning people that their duty to themselves, those dependant on them and to the general community was, as soon as the first symptoms appeared, to remain at home, and preferably in bed, to seek medical advice, and to strictly carry out the advice given.

If this had been done, most of the Medical Officers who deal with the epidemic in their annual reports state that many valuable lives would have been saved.

During the period in which the Schools were closed, I frequently heard of sales of work, concerts, dances, etc., being held. Meetings of such a nature even being held in the Schools, although it must have been known to everyone that the Schools were closed with the specific purpose of preventing people congregating in close rooms.

In epidemics such as this, effective action cannot possibly be taken by Sanitary Authorities unless every individual is willing to recognise his or her duty to the community, and to share the burden of responsibility with the Sanitary Authority.

As individuals, our duty to the community is not sufficiently recognised, sometimes through ignorance, but more often from want of thought and selfishness.

An address, or series of addresses, on the duty of the individual, given in every town, village and parish of the County, would, I feel, be a public health measure of far reaching utility.

Midwives' Act.

47.5 per cent. of the total births were attended by Midwives.

The number of intimations received of Midwives sending for medical help was 47.

332 visits of inspection have been paid to certified midwives during the year.

The supply of Midwives is far from adequate, especially in some of the Rural districts, but it is hoped that arrangements to fill the gaps will be made at as early a date as possible.

Maternity and Child Welfare.

The County Council is the Administrative Authority for the Notification of Births Acts for the whole of the Administrative County, with the exception of the Boroughs of Whitehaven and Workington, and the Urban district of Penrith. Anything I have to say, therefore, dealing with these Acts and with Maternity and Child Welfare, refers to the whole County, with the exception of these three areas.

During the year, 3,437 births were registered, of these 2,973 were notified, equivalent to nearly 90 per cent. It will, therefore, be obvious that in most of the Sanitary districts the requirements of the Notification of Births Acts were carried out exceedingly well. In the Urban districts of Egremont and Keswick, and the Rural districts of Bootle and Brampton, only a small proportion of the Births were notified.

During the first quarter of the year there were only three Health Visitors at work, and during that time they paid first visits to 492 babies, as well as 972 re-visits, a total during the quarter of 1,464 visits.

On April 1st, the new scheme, with which I have already dealt in special Reports, came into operation, and during the nine months in which it has been working, 9,968 visits have been paid to infants whose births were notified, and 30 to infants whose births were not notified.

A total of 11,462 visits paid by Health Visitors and Nurses during the year.

In addition to these, 316 ante-natal visits have been paid to expectant mothers, and 299 visits to ailing children between one and five years of age.

A most satisfactory year's work, and one which reflects the greatest credit on the staff of Health Visitors and Nurses engaged in this work.

It is not yet possible to give in detail the results of the work ; this I hope to be able to do in a subsequent report. I have the utmost confidence that if people will only take advantage of the facilities offered to them, results, and very marked results will not be long in showing themselves.

In some districts great difficulty has been experienced in obtaining a sufficient supply of milk for babies and children. This difficulty has not been confined to poor people who were unable to pay, but has been shared in by those who were able and willing to pay even the high prices at present charged. Nor has the difficulty been confined to Urban areas, in at least one Rural area milk has been a very scarce commodity. Dried milk has been supplied from my office in these cases where the Health Visitor or Nurse has reported inability of parents to procure an adequate supply, and I hope that when Maternity and Child Welfare centres are established, I may be allowed to keep stocks of dried milk, and give or sell it at or below cost price where fresh milk is not obtainable.

For babies and young children pure milk should not be a luxury, it is a necessity, just as much as a pure water supply is a necessity. At the present time few people raise any objection to securing a pure water supply, and consider almost any outlay in procuring it as money well spent, but as regards milk, nothing is done by Local Authorities beyond paying more or less attention to a few regulations under certain Milk and Dairies Orders.

Is it too much to hope that the time is not far distant when either County Councils or Local Authorities will undertake the duty of supplying pure, wholesome milk to everybody in their area?

Housing.

With regard to the Housing question, nothing of any importance has taken place during the year under review. I think it better, therefore, to defer any discussion of this important matter till my next Report, before the issue of which, it is to be hoped, a satisfactory solution will be found.

Sale of Food and Drugs Acts.

These Acts are carried out by the Police. The following Report has been submitted by the County Analyst :—

CHEMICAL LABORATORY,

40 LOWTHER STREET,

WHITEHAVEN,

4th January, 1919.

GENTLEMEN,

SALE OF FOOD AND DRUGS ACTS.

During the year 1918, all samples submitted to me for analysis under this Act were received from Police Officers acting as Food Inspectors. The number of samples analysed was 312, of these 21 were found to be adulterated. This is equal to a proportion of 6.7 per cent., and is slightly better than last year, when the proportion of adulteration was 7.2 per cent.

Milk was the only article found to be adulterated. Exclusive of seven samples taken as “appeals to the cow,” 179 were analysed, and in 21 of these the milk-fat or non-fatty solids fell below the minimum percentages fixed by the Sale of Milk Regulations for genuine milk. Consequently the percentage of adulteration in milk is 11.7 per cent. Last year it was 12.8.

The average composition of the 186 samples of milk analysed during the year was :—

Milk-fat	3.50
Non-fatty Solids	8.81
Water	87.69
	<hr/>
	100.00
	<hr/>

Taking the average of each quarter of 1918 separately, we have :—

	<i>Jan. to Mar.</i>		<i>April to June,</i>		<i>July to Sept.,</i>		<i>Oct. to Dec.,</i>	
	51 samples.		42 samples.		47 samples.		46 samples	
Milk-fat ..	3.42	..	3.37	..	3.54	..	3.67	
Non-fatty ..	8.76	..	8.88	..	8.77	..	8.82	
Solids								
Water ..	87.82	..	87.75	..	87.69	..	87.51	
	<hr/>		<hr/>		<hr/>		<hr/>	
	100.00	..	100.00	..	100.00	..	100.00	
	<hr/>		<hr/>		<hr/>		<hr/>	

I append a list of all the articles analysed during the year under the Sale of Food and Drugs Acts.

I am, Gentlemen,

Your obedient servant,

ROBERT HELLON, Ph.D., F.I.C.,
County Analyst.

ARTICLES.

Examined under the Sale of Food and Drugs Acts during
the Year 1918.

Milk	186 samples.
Coffee	17 ..
Rice	12 ..
Oatmeal	11 ..
Confectionery and Jam	10 ..
Butter	9 ..
Sugar	9 ..
Cocoa	9 ..
Pepper	9 ..
Lard	7 ..
Baking Powder	5 ..
Tea	4 ..
Tapioca	4 ..
Mustard	3 ..
Arrowroot	3 ..
Flour	2 ..
Cornflour	2 ..
Bread	1 sample
Sago	1 ..
Cream of Tartar	1 ..
Wheat Meal	1 ..
Ground Ginger	1 ..
Margarine	1 ..
Syrup	1 ..
Treacle	1 ..
Cheese	1 ..
Cooking Compound	1 ..

Causes of Death at Different Periods of Life in the Administrative County of Cumberland, 1918.

CAUSES OF DEATH.			Sex.	All Ages.	AGGREGATE OF URBAN DISTRICTS.										All Ages.	AGGREGATE OF RURAL DISTRICTS.									
					0—	1—	2—	5—	15—	25—	45—	65—	0—	1—		2—	5—	15—	25—	45—	65—				
ALL CAUSES	..	..	M	1019	168	48	59	66	59	151	223	245	733	96	21	37	35	52	109	152	231		
			F	1040	119	69	51	61	86	175	180	299	698	64	30	29	34	54	118	140	229				
1 Enteric Fever	..	..	M	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	1	1	—		
			F	1	—	—	—	—	—	1	—	—	1	—	—	—	—	—	1	—	—				
2 Smallpox	..	..	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
			F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
3 Measles	..	..	M	18	5	8	4	1	—	—	—	—	8	3	3	2	—	—	—	—	—		
			F	18	4	9	3	2	—	—	—	—	8	2	1	3	2	—	—	—	—				
4 Scarlet Fever	..	..	M	—	—	—	—	—	—	—	—	—	1	—	—	1	1	—	—	—	—		
			F	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—				
5 Whooping Cough	..	..	M	10	7	1	2	—	—	—	—	—	3	2	—	1	—	—	—	—	—		
			F	12	7	3	2	—	—	—	—	—	9	2	4	3	—	—	—	—	—				
6 Diphtheria and Croup	..	..	M	12	—	—	5	7	—	—	—	—	5	—	—	2	3	—	—	—	—		
			F	12	—	1	6	5	—	—	—	—	4	—	—	1	2	1	—	—	—				
7 Influenza	..	..	M	160	7	8	17	18	27	53	26	4	148	5	3	13	15	30	55	18	9		
			F	205	6	12	15	20	40	73	25	14	142	5	9	8	10	30	55	16	9				
8 Erysipelas	..	..	M	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	1	1	2		
			F	1	—	—	—	—	—	—	—	1	2	—	—	—	—	—	1	—	—				
9 Pulmonary Tuberculosis	..	..	M	43	—	—	—	5	10	16	10	2	27	1	—	—	1	4	14	6	1		
			F	69	1	—	—	4	16	34	13	1	38	—	—	—	2	8	19	8	1				
10 Tuberculous Meningitis	..	..	M	6	1	1	2	2	—	—	—	—	6	2	2	2	1	1	—	—	—		
			F	3	—	—	1	2	—	—	—	—	3	—	—	1	—	—	—	—	—				
11 Other Tuberculous Diseases	..	..	M	19	—	4	2	4	3	5	2	1	9	1	1	2	1	—	3	1	—		
			F	15	1	4	—	3	—	—	—	—	10	3	—	—	—	1	3	—	—				
12 Cancer, Malignant Disease	..	..	M	60	—	—	1	—	1	6	27	25	62	—	—	—	—	—	2	30	30		
			F	70	—	—	—	—	1	6	30	33	54	—	—	—	—	—	2	25	27				
13 Rheumatic Fever	..	..	M	3	—	—	—	—	1	—	2	—	3	—	—	1	1	—	—	1	1		
			F	6	—	—	—	1	4	1	—	—	3	—	—	—	—	—	—	—	—				
14 Meningitis	..	..	M	9	3	1	1	2	—	1	1	—	7	1	1	2	2	—	1	—	—		
			F	2	1	—	1	—	—	—	—	—	2	—	—	—	—	1	1	—	—				
15 Organic Heart Disease	..	..	M	61	—	—	—	1	2	3	23	32	62	—	—	—	—	2	16	44			
			F	93	—	1	—	4	—	15	23	50	60	—	—	—	1	2	4	15	38				
16 Bronchitis	..	..	M	86	16	4	4	3	—	1	18	40	22	8	—	—	—	—	1	3	10		
			F	92	13	7	5	—	2	3	16	46	48	7	4	2	—	1	1	4	29				
17 Pneumonia (all forms)	..	..	M	103	17	11	12	10	5	18	19	11	58	9	5	2	1	6	10	16	9		
			F	78	13	14	11	7	2	9	9	13	44	8	5	4	4	5	4	6	8				
18 Other Respiratory Diseases	..	..	M	26	2	2	1	2	—	6	7	6	13	3	—	2	—	—	1	4	3		
			F	11	2	1	—	1	—	1	—	6	17	—	—	1	1	—	1	9	5				
19 Diarrhoea &c.	..	..	M	18	12	3	3	—	—	—	—	—	15	5	2	2	1	—	—	—	5		
			F	25	10	11	1	—	1	—	1	—	10	5	5	—	—	—	—	—	—				
20 Appendicitis and Typhlitis	..	..	M	3	—	—	1	2	—	—	—	—	5	—	—	—	1	2	—	1	—		
			F	2	—	—	1	—	—	1	—	—	5	—	—	—	4	1	—	—	—				
21 Cirrhosis of Liver	..	..	M	5	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—	—	—		
			F	4	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	—				
21a Alcoholism	..	..	M	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—		
			F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
22 Nephritis and Bright's Disease	..	..	M	18	—	—	—	—	1	3	7	7	12	1	—	—	—	—	3	2	6		
			F	20	—	—	1	3	4	4	5	3	16	—	—	—	1	—	1	9	5				
23 Puerperal Fever	..	..	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
			F	1	—	—	—	—	—	—	—	—	3	—	—	—	—	—	3	—	—				
24 Parturition, apart from Puerperal Fever	..	..	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	5	1	—		
			F	9	—	—	—	—	2	7	—	—	8	—	—	—	—	—	—	—	—				
25 Congenital Debility, &c.	..	..	M	67	66	—	1	—	—	—	—	—	36	33	1	—	1	—	—	1	—		
			F	35	35	—	—	—	—	—	—	—	24	23	—	—	1	—	—	—	—				
26 Violence, apart from Suicide	..	..	M	54	2	—	3	2	5	18	12	12	26	—	2	3	5	3	5	8	—		
			F	13	1	1	2	3	2	—	2	2	17	—	—	3	2	3	3	3	3				
27 Suicide	..	..	M	8	—	—	—	—	—	4	4	—	10	—	—	—	—	2	2	6	—		
			F	4	—	—	—	—	2	1	1	—	1	—	—	—	—	—	—	1	—				
28 Other Defined Diseases	..	..	M	221	29	5	—	7	4	14	56	106	179	22	1	3	2	5	7	34	105		
			F	237	25	4	3	5	5	15	51	129	164	8	1	—	—	16	36	36	102				
29 Causes Ill-defined or Unknown	..	..	M	8	1	—	—	—	—	3	4	—	12	—	—	—	—	—	2	5	5		
			F	2	—	1	—	—	—	1	—	—	3	1	—	—	—	—	1	1	1				



Causes of Death in the Administrative Areas in the County of Cumberland, 1918.

CAUSES OF DEATH.	Arlecdon and Frizington U.D.		Aspatria U.D.		Cleator Moor U.D.		Cockermouth U.D.		Egremont U.D.		Harrington U.D.		Holme Cultram U.D.		Keswick U.D.		Maryport U.D.		Millom U.D.		Penrith U.D.		Whithaven M.B.		Wigton U.D.		Workington M.B.		Alston with Garrigill R.D.		Booth R.D.		Brampton R.D.		Carlisle R.D.		Cockermouth R.D.		Longtown R.D.		Penrith R.D.		Whithaven R.D.		Wigton R.D.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
CIVILIANS ONLY ALL CAUSES	41	31	18	25	71	61	42	57	78	67	40	25	31	37	34	35	91	100	85	70	61	71	180	218	23	42	224	201	23	28	42	44	60	72	80	81	179	168	60	41	84	77	107	99	98	88
1 Enteric Fever	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2 Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3 Measles	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4 Scarlet Fever	—	—	—	—	1	4	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5 Whooping Cough	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6 Diphtheria and Croup	1	—	1	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
7 Influenza	3	6	4	—	13	6	18	14	26	27	6	7	1	3	4	5	22	34	12	12	3	10	19	38	2	6	27	33	6	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8 Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9 Pulmonary Tuberculosis	4	—	—	3	2	6	—	2	2	1	4	—	3	1	2	6	—	6	3	3	7	6	9	16	1	5	6	14	—	3	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10 Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
11 Other Tuberculous Diseases	2	—	—	—	2	1	—	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12 Cancer, Malignant Disease	1	2	—	—	5	2	2	8	5	3	—	—	3	5	5	4	6	5	4	8	5	8	9	11	1	3	14	11	2	3	8	3	8	7	13	8	10	10	2	2	5	7	7	5	7	
13 Rheumatic Fever	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
14 Meningitis	1	—	1	—	2	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
15 Organic Heart Disease	2	3	2	4	1	4	—	6	1	4	4	—	2	7	2	2	5	10	8	5	12	13	6	16	3	4	13	15	1	3	5	3	7	3	5	9	16	13	4	5	12	8	3	5	9	
16 Bronchitis	1	2	3	—	2	3	4	6	5	3	4	—	1	3	2	4	2	7	13	10	2	2	31	28	3	7	13	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17 Pneumonia (all forms)	4	5	—	—	10	4	1	3	9	7	1	4	2	1	3	2	9	4	5	2	7	5	17	16	1	2	34	23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18 Other Respiratory Diseases	3	—	—	—	3	1	2	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
19 Diarrhoea, &c. (under 2 years)	2	1	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
20 Appendicitis and Typhlitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
21 Cirrhosis of Liver	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
21a Alcoholism	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
22 Nephritis and Bright's Disease	—	—	—	—	1	3	—	4	—	1	4	2	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23 Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
24 Parturition, apart from Puerperal Fever	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
25 Congenital Debility, &c.	1	2	1	1	7	5	2	—	7	2	5	2	2	1	—	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
26 Violence, apart from Suicide	5	—	1	—	8	—	1	—	2	—	2	—	2	1	2	—	3	4	5	—	2	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
27 Suicide	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28 Other Defined Diseases	10	8	3	10	11	20	9	8	15	11	7	5	11	12	11	9	20	20	21	17	15	22	43	44	7	10	41	45	7	3	8	14	14	26	17	23	42	30	23	11	27	15	26	19	23	
29 Causes ill-defined or unknown	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Special Causes (included above)—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Polio-myelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—								

